AMENDMENTS TO THE CLAIMS

Please cancel claims 2, 3, 4 and 7 without prejudice.

Please amend claims 1, 5 and 8-11 as follows:

1. (Currently Amended) An optical data bus communication system of an artificial satellite, comprising: a plurality of first devices, each of which is equipped with an optical transmitter each transmitter transmitting signals of a differing wavelength; a reflection means that is provided on the entire inner surface of, or at prescribed locations inside, the case of said artificial satellite; and a plurality of second devices, each of which is equipped with an optical receiver that receives optical signals that are transmitted from said optical ~~transmitter~~ transmitters both directly and after reflection and diffusing by said reflection means, each receiver receiving optical signals of a different wavelength and ~~reproduces~~ reproducing said optical signals from these received signals.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) An optical data bus communication system according to claim 1 wherein each said optical transmitter is equipped with a wide-angle LED as a light source for transmission, and each said optical receiver is equipped with a wide-angle photodiode for receiving light emitted from said LED.

6. (Original) An optical data bus communication system according to claim 1

wherein said reflection means is a polygon reflection mirror.

7. (Cancelled)

8. (Currently Amended) An optical data bus communication system according to claim 1, wherein each said optical receiver comprises: an O/E converter for converting received optical signals to electrical signals; a gain control means for converting electrical signals that are converted by said O/E converter to electrical signals of a required level; and a pulse width shaping means for converting electrical signals of a required level that are converted by said gain control means to digital signals of a prescribed pulse width.

9. (Currently Amended) An optical data bus communication system according to claim 8, wherein said pulse width shaping means comprises: a comparator that takes output of said gain control means as one input and a reference voltage as another input and, based on the positive or negative of the difference between these inputs, converts electrical signals of a required level that are output from said gain control means to digital signals; and a sampling means that performs sampling by a sampling signal of a prescribed frequency to convert digital signals that are converted by said comparator to digital signals of a prescribed pulse width.

10. (Currently Amended) An optical data bus communication method that is used in an artificial satellite in which plural first devices each having an optical transmitter transmitting optical signals of a particular wavelength, and plural second devices each having an optical receiver ~~are loaded~~ receiving optical signals of a particular wavelength; said method comprising the steps of:

transmitting optical signals from one or more of said optical ~~transmitter~~ transmitters to one or more of said optical ~~receiver~~ receivers;

reflecting and diffusing optical signals that are transmitted from said one or more optical ~~transmitter~~ transmitters with a reflection means that is provided on the entire inner surface of, or at prescribed locations inside, the case of said artificial satellite; and

receiving optical signals that are transmitted from said one or more optical ~~transmitter~~ transmitters both directly and after said reflecting and diffusing to reproduce said optical signals from these received signals in said optical receiver.

A1 cont.

11. (Currently Amended) An optical data bus communication method according to claim 10 wherein said step in which optical signals are reproduced includes the steps of: converting optical signals that are received from said optical ~~transmitter~~ transmitters to electrical signals; further converting said electrical signals to electrical signals of a required level; and carrying out sampling at a sampling signal of a prescribed frequency to convert said electrical signals of a required level to digital signals of a prescribed pulse width.